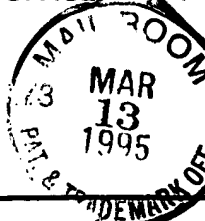


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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
Q	4,228,404	10/1980	Widlar	330	267	02/1979
Q	4,595,974	06/1986	Lethellier	363	21	09/1984
Q	4,564,769	01/1986	Melamed	307	300	09/1983
Q	4,645,945	02/1987	de Sartre	307	254	03/1985

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

1 Preliminary Data Sheet, "LM1070 5A High Efficiency Switching Regulator,"
Linear Technology Corporation, 1986, pp. 10-14 to 10-17.

2 Nelson, Carl, "Switching Controller Chip Handles 100W from a 5-Pin Package,"
Electronic Design, Dec. 1985, pp. 73-78.

3 Data Sheet, "LM117/LM217/LM317-3 Terminal Adjustable Regulator," National
Semiconductor Corporation Linear Databook, 1982, pp. 1-23 to 1-30. *Not Found*

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER
INITIAL

~~Application Note AN-110, "Fast IC Power Transistor with Thermal Protection,"~~
~~National Semiconductor Corporation, May 1974, pp. AN110-1 to AN110-6~~
Not found

~~Data Sheet, "LM1005M/LM1005C Logic Controlled Regulator," Linear Technology~~
~~Corporation, Linear Databook, 1985, pp. 259-270.~~
Not found

~~Data Sheet, "LM1001 Precision Operational Amplifier," Linear Technology~~
~~Corporation, Linear Databook, 1985, pp. 24-25.~~ *24-27, 29-35, No date*

~~Knickmeyer, K. H., "Dynamic Transistor Antisaturation Control," IBM Technical~~
~~Disclosure Bulletin, Vol. 17, No. 4, September 1974, pp. 1091-1092.~~

EXAMINER

Riley

DATE CONSIDERED

12 May 95

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U.S. PATENT DOCUMENTS

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Q	4,727,264	02/1988	Neidorff	307	125	06/1985
Q	3,105,158	09/1963	Nichols	307	88.5	06/1960
Q	3,534,281	10/1970	Hillhouse	307	237	02/1969
Q	3,569,742	03/1971	Schroeder	307	254	08/1968
Q	3,641,369	02/1972	Wallingford	307	206	07/1970
Q	3,845,405	10/1974	Leidich	330	207	05/1973
Q	4,028,561	06/1977	Black et al.	307	330 300	03/1976
Q	4,031,416	06/1977	Peil	307	299	03/1976

FOREIGN PATENT DOCUMENTS

TRANSLATION

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Q ⁸	Collector Diffusion Isolation - A New Bipolar Process for Integrated Circuits, 2nd Edition, October 1972, pp.4-31.
Q ⁴	Volume III of the Proceedings of Powercon 3: Third National Solid State Power Conversion Conference, June 1976, pp. E3-1 to E3-7.
Q ¹⁰	Data Sheet, "LM101A/LM301A, LM107/LM307 Operational Amplifiers," Linear Technology Corporation Linear Databook, 1986, pp. 2-177 to 2-182.

EXAMINER

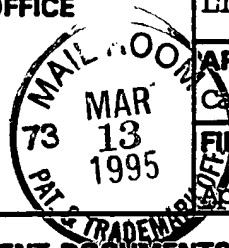
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U.S. PATENT DOCUMENTS

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Q	4,164,737 4164747	08/1979	Gerstner	357	46	03/1977
Q	4,426,590	01/1984	Rischmiller	323	076	11/1981
Q	4,461,960	07/1984	Yasunaga	307	243	11/1983
Q	4,542,399	09/1985	Monticelli	357	46	02/1983

FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Q 11	Data Sheet, "LM119/LM219/LM319 High Speed Dual Comparator," National Semiconductor Corporation Linear Databook, 1982, pp. 5-22 to 5-26. No date
Q 12	Data Sheet, "LM111/LM211 Voltage Comparator," National Semiconductor Corporation Linear Databook, 1982, pp. 5-16 to 5-21. No date
Q 13	Dobkin, "Monolithic Temperature Transducer," 1974 IEEE International Solid-State Circuits Conference, Digest of Technical Papers, pp. 126-127, 239.

EXAMINER

Riley

DATE CONSIDERED

12 May 95

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2102

U.S. PATENT DOCUMENTS

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<i>Q</i>	3,617,845	11/1971	McKenna	318	341	04/1970
<i>Q</i>	3,996,506	12/1976	Kichak	321	13	01/1975
<i>Q</i>	4,027,228	05/1977	Collins	323	21	03/1976
<i>Q</i>	4,074,147	02/1978	Infante	307	230	12/1976
<i>Q</i>	4,156,837	05/1979	Baker	323	4	04/1977
<i>Q</i>	4,176,309	11/1979	Schulz et al.	323	4	03/1978
<i>Q</i>	4,213,068	07/1980	Ahmed	307	255	01/1978
<i>Q</i>	4,215,279	07/1980	Lataire et al.	307	254	03/1978

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
<i>Q</i>	0,159,233	03/1985	EPO				X

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>Q</i>	Bell, David A., "Designing Optimal Base Drive for High Voltage Switching Transistors," Proceedings of Powercon 7, 1980, pp. F1-1 to F1-11.
<i>Q</i>	Carpenter, Ralph, "A New Universal Proportional Drive Technique for High Voltage Switching Transistors," Proceedings of Powercon 8, Power Concepts, Inc. 1981, pp. D2-1 to D2-15.
<i>Q</i>	Perkinson, Joseph and Brand, Jerry, "A New Proportional Base Drive Technique Optimizes Turn Off Performance," Proceedings of Powercon 10, Power Concepts, Inc., 1983, pp. B-1-1 to B-1-11.

EXAMINER

Riley

DATE CONSIDERED

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U.S. PATENT DOCUMENTS

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<i>Q</i>	4,218,730	08/1980	Marumoto et al.	363	124	11/1978
<i>Q</i>	4,220,873	09/1980	Giordano	307	254	09/1980
<i>Q</i>	4,234,805	11/1980	Carlsen, II	307	254	03/1978
<i>Q</i>	4,254,372	03/1981	Moore, Jr.	323	277	02/1979
<i>Q</i>	4,286,175	08/1981	Baker	307	581	05/1979
<i>Q</i>	4,291,259	09/1981	Marumoto et al.	318	139	12/1979
<i>Q</i>	4,300,081	11/1981	Van Landingham	318	599	03/1980
<i>Q</i>	4,309,645	01/1982	De Villeneuve	318	341	05/1979

FOREIGN PATENT DOCUMENTS

TRANSLATION

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>Q</i> ₁₇	Avant, R. L., West, G. E. and Palma, R. E., "A Proportional Drive for Discontinuous Mode DC-to-DC Converters," IEEE, 1984, pp. 352-358.
<i>Q</i> ₁₈	Grebene, Alan. B., "Bipolar and MOS Analog Integrated Circuit Design," John Wiley & Sons, 1984, pp. 183 ff. 183-185
<i>Q</i> ₁₉	Pressman, A., "Switching and Linear Power Supply, Power Converter Design," Hatden Book Co., Inc., 1977, pp. 49-52.

EXAMINER

Riley

DATE CONSIDERED

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
Q	4,323,825	04/1982	Hayes	315	387	10/1980
Q	4,333,120	06/1982	Kotowaki	361	79	02/1980
Q	4,337,494	06/1982	Huykman	361	86	04/1980
Q	4,345,164	08/1982	Gies	307	255	11/1979
Q	4,346,312	08/1982	Christopherson	307	270	11/1979
Q	4,355,277	10/1982	Davis et al.	323	351	10/1980
Q	4,375,073	02/1983	Glogolja et al.	361	91	01/1980
Q	4,378,580	03/1983	Stich	361	91	11/1981

FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Q ₂₀	Rischmueller, K., "An Improved Base Drive Method Eliminates Switching Aid Networks in Transistorized High Power Converter Circuits," Proceedings of Powercon 8, Power Concepts, Inc., 1981, pp. G1-1-1 to G-1-1-9.
Q ₂₁	Shultz, Warren, "BAKER Clamps - Traditional Concepts Updated for Third generation Power Transistors," Reprinted with permission of Power Conversion International, July/Aug 1984. (No page numbers)
Q ₂₂	Holland, Barney, "A New Integrated Circuit for Current Mode Control," Proceedings of Powercon 10, Power Concepts, Inc., 1983, pp. C-2-1 to C-2-7.

EXAMINER

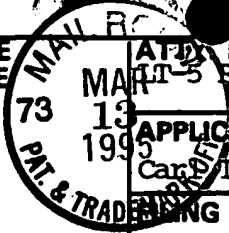
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U.S. PATENT DOCUMENTS

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<i>Q</i>	4,427,902	01/1984	Hickman et al.	307	270	03/1982
<i>Q</i>	4,430,608	02/1984	Nesler	323	282	12/1981
<i>Q</i>	4,441,068	04/1984	Smith	323	351	10/1981
<i>Q</i>	4,442,411	04/1984	Gehring	330	296	09/1981
<i>Q</i>	4,461,979	07/1984	Jeenicke et al.	315	209	05/1982
<i>Q</i>	4,480,201	10/1984	Jaeschke	307	570	06/1982
<i>Q</i>	4,491,744	01/1985	Corey	307	270	12/1983
<i>Q</i>	4,520,438	05/1985	Norton	363	98	07/1983

FOREIGN PATENT DOCUMENTS

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						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>Q</i> 23	Rippel, Wally E., "A New Closed Loop Adaptive Base Drive Scheme Minimizes Transistor Drive and Saturation Losses," Proceedings of Powercon 11, Power Concepts, Inc. 1984, pp. G-1-1 to G-1-13.
<i>Q</i> 24	Berger, H. H. and Wiedmann, S. K. 07/00/77, "Speed Enhancement of Saturated Transistors," <u>IBM Technical Disclosure Bulletin</u> , Vol. 20, No. 2, July 1977, pp. 636-637.
<i>Q</i> 28	Bonkowski, Richard L., "A Technique for Increasing Power Transistor Switching Frequency," <u>IEEE Transactions on Industry Applications</u> , Vol IA-22, No. 2, March/April 1986, pp. 240-243.

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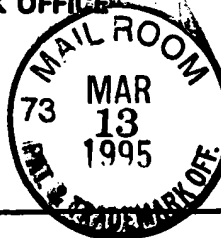
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U.S. PATENT DOCUMENTS

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Q	4,528,463	07/1985	Kung	307	270	06/1982
Q	4,533,839	08/1985	Balakrishnan	307	270	01/1983
Q	4,549,095	10/1985	Stefani et al.	307	254	11/1982
Q	4,588,906	05/1986	Taylor	307	270	04/1984
Q	4,608,524	08/1986	Yokobori	318	254	04/1985
Q	4,645,986	02/1987	Melbert et al.	315	387	05/1985
Q	4,695,915	09/1987	Mahalek et al.	361	56	09/1987
Q	4,749,876	06/1988	Gale et al.	307	270	12/1986

FOREIGN PATENT DOCUMENTS

TRANSLATION

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Q 26	Bonkowski, R. L., "A Technique for Increasing Power Transistor Switching Frequency," published by IEEE, February 1984, pp. 735-738. 271 735-738
Q 27	Dobkin, Robert C., "IC with Load Protection Simulates Power Transistor," <u>Electronics</u> , February 7, 1974, pp. 119-123.
Q 28	Dobkin, Robert C., "Variable Output Three Terminal Regulator," <u>New Electronics</u> , July 11, 1978, pp. 36 and 39. <u>No Date</u>

EXAMINER

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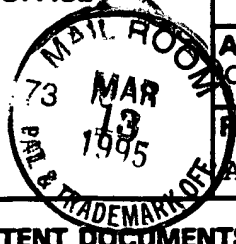
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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
Ⓢ	4,777,386	10/1988	Majumdar	307	270	10/1987

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Ⓢ29	Dobkin, Robert C., "Break Loose from Fixed IC Regulators. With Adjustable Three-Terminal Power monolithics You Get Top Performance Along with Versatility," <u>Electronic Design</u> , Vol. 25, No. 8, April 12, 1977, pp. 118-122.
Ⓢ30	Frederiksen, Thomas M., <u>Intuitive IC Electronics. A Sophisticated Primer for Engineers and Technicians</u> , 1982, pp. 78-81.
Ⓢ31	Gersbach, E. E., "Saturation Control Circuit," <u>IBM Technical Disclosure Bulletin</u> , Vol. 21, No. 8, January 1979, p. 3109.

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2102

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER
INITIALQ₂Horowitz, Paul and Hill Winfield, "Transistor Saturation," The Art of Electronics, Cambridge University Press, 1993, pp. 1062-1063.Q₃₃~~Nelson, Carl T., "Technological Advances in Monolithic Instrumentation Amplifier and Voltage Regulators," WESCON Conference Record, Vol 25, 1981, paper 19/2, pp. 1-4. No date~~Q₃₄Nelson, Carl T., "Power Distribution and Regulation can be Simple, Cheap and Rugged. Self-contained 3-pin regulators are versatile building blocks that simplify many power distribution problems. Here are some useful applications," Electronic Design News, February 20, 1973, pp. 52-58.Q₃₅Nelson, Carl, "New Process Boosts Current Levels of Monolithic Voltage Regulator. Bipolar IC borrows power npn structure from discrete technology to handle currents of 10A plus," Electronics, June 30, 1981, pp. 111-114.Q₃₆~~Redl, Richard and Sokal, Nathan O., "Optimizing Dynamic Behavior with input and Output Feed Forward and Current-Mode Control," Proceedings of Powercon 7, 1980, pp. H1-1 to H1-16. No Date~~Q₃₇Rischmueller, K. "Lo Power. Auto-regulated and auto-protected drives for power switching," Power Conversion International, September/October 1979, pp. 22-28. 22, 24, 26, 28Q₃₈Schultz, Warren, "Baker Clamps. Traditional concepts updated for third generation power transistors," Power Conversion International, July/August 1984, pp. 40-45.Q₃₉Apathy, Anand K., and Messenger, Lawrence W., "Base Drive for High Power/Frequency PWM Transistor Inverter", IEEE, September 1985, pp. 1020-1024.Q₄₀Application Note, "Designing Switching Regulators," Linear Applications, National Semiconductor, March 1969, pp. AN2-1 to AN2-12.

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Riley

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